in specialists compared to GPs (23,5% vs 14,0% respectively, P<0,04, CI 1,05-3,38). On contrary, more specialists chose to never discuss antibiotic treatment with patients compared to GPs (19,1% vs 7,2%, P<0,001, CI 1,46-6,2) and there were more GPs that always discussed antibiotic treatment with patients compared to specialists (15,8% vs 5,9%, P<0,01, CI 0,14-0,78). Patients' co-payment seems to be more sensitive issue for GPs compared to specialists since 29% of GPs considered co-payment all the time or most of the time when choosing ATB compared to specialists (18,4%, P=NS). **CONCLUSIONS:** This survey revealed that both GPs and specialists are aware of the importance of antimicrobial resistance and demonstrated differences between specialties with respect to antimicrobial use and knowledge. Antimicrobial education is needed but may be more effective if it is tailored to specific specialties.

PIN114

IDENTIFYING RESEARCH GAPS IN ANTIMICROBIAL RESISTANCE (AMR): LITERATURE REVIEW, POTENTIAL RESEARCH QUESTIONS AND STUDY DESIGNS

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OBJECTIVES: Generate research questions through studies published and financed by government or public research intuitions is an important tool in management of the public health system. While there are a growing number of papers, guidelines and funding in research, there are specific needs for different countries that need answers. Thus, researching gaps within the needs of each country contributes to optimization of public spending and guidance for promoting effective research. **METHODS:** We conducted a search in the Brazilian database "Pesquisa Saúde" as in the international databases Pubmed Health; Cochrane Library and Prospero. For the international databases, we used the terms: " Drug Resistance, Microbial", "Antimicrobial Drug Resistances" and "Resistance, Antibiotic" with meta-analyzes within 10 years cutouts. **RESULTS:** A total of 212 trials were identified. Those trials were scored as 1 for the most important and 2 for least significant, according to local priorities. We obtained 107 studies with a score 1. These studies were carefully analyzed to guide which unanswered questions should develop in new researches. **CONCLUSIONS:** Clinical and epidemiological characterization of gaps has been identified on mortality and morbidity, related with antimicrobial prescribing patterns. We also identified gaps in prevention and control of prescription practices, colonization time in patients and detection of Mycobacterium tuberculosis strains. About economic impact and cost of RAM for the health system we identified gaps in hospital infections. The gaps identified will subside the financing of new studies by DECIT / MS in order to contribute to the national plan for prevention and combating RAM which is part of the WHO global plan.

PIN115

ANALYSIS OF HIV – INFECTION IN KAZAKHSTAN

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OBJECTIVES: This article describes the epidemiological features of spread of HIV infection in the Republic of Kazakhstan. We have examined gender-specific of HIV-infection in the Republic of Kazakhstan. As of December 31, 2013, 19 905 cases of HIV- infection have been registered in the country, 1933 persons of which were tested positive for AIDS, 1431 persons died. **METHODS:** All the cases of HIV- transmission in Kazakhstan for 26 years (1987-2013) have been analyzed. Statistical data was processed by means of BIOSTAT program. Extensive, crude, age indexes were calculated based on the general methods of health statistics **RESULTS:** The prevalence of HIV in Kazakhstan is 86,5 out of 100 thousand people (0,090/0000), while the age group is people from 15 years old and older- 0,140/0000. Unequal distribution of the cases of HIV-infection on the territory of Kazakhstan is being observed. Accroding to the cumulative figures (1987 – 2013), 60,9% of HIV-positive people got an infection parentally (during the intravenous injection of narcotic substances), while the ratio of the persons with sexually transmitted infection is 34%. In 2013, the sexual transmition (heterosexual) of HIV-infection constitued 59,8%, while parental transmission made 33,5%. The highest ratio among the registered cases falls within the age group of 20 to 39 years old, i.e. 70,7%. Over the past years, the proportion of women in the disease detection structure is 44,1% (in 2011 - 39,6%; in 2012- 41,9%), the proportion of men among the detected cases is decreasing - 55,9% (in 2011 - 60,4%; in 2012 - 58,1%). **CONCLUSIONS:** Epidemiological analysis shows that the number of HIV-positive is increasing, the largest part of them are young people at the age of 20 to 39 years old. The ratio of HIV-positive women has increased, the infection transmission route has changed- the heterosexual transmission is taking the leading position.

PIN116

DO PNEUMOCOCCAL CONJUGATE VACCINES REPRESENT GOOD VALUE FOR MONEY IN A LOWER-MIDDLE INCOME COUNTRY? A COST-UTILITY ANALYSIS IN THE PHILIPPINES

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OBJECTIVES: The objective of this study is to assess the value for money of introducing pneumococcal conjugate vaccines as part of the immunization program in a lower-middle income country, the Philippines, which is not eligible for GAVI support and lower vaccine prices. It also includes the newest clinical evidence evaluating the efficacy of PCV10, which is lacking in other previous studies. **METHODS:** A cost-utility analysis was conducted. A Markov simulation model was constructed to examine the costs and consequences of PCV10 and PCV13 against the current scenario of no PCV vaccination for a lifetime horizon. A health system perspective was employed to explore different funding schemes, which include universal or partial vaccination coverage subsidized by the government. Results were presented as incremental cost-effectiveness ratios (ICERs) in Philippine peso (Php) per QALY gained (1 USD = 44.20 Php). Probabilistic sensitivity analysis was performed to determine the impact of parameter uncertainty. **RESULTS:** With universal vaccination at a cost per dose of Php 624 for PCV10 and Php 700 for PCV13, both PCVs are cost-effective compared to no vaccination given the ceiling threshold of Php 120,000 per QALY gained, yielding ICERs of Php 68,182 and Php 54,510 for PCV10 and PCV13, respectively. Partial vaccination of 25% of the birth cohort resulted in significantly higher ICER values (Php 112,640 for PCV10 and Php 84,654 for PCV13) due to loss of herd protection. The budget impact analysis reveals that universal vaccination would cost Php 3.87 billion to 4.34 billion per annual, or 1.6 to 1.8 times the budget of the current national vaccination program. **CONCLUSIONS:** The inclusion of PCV in the national immunization program is recommended. PCV13 achieved better value for money compared to PCV10. However, the affordability and sustainability of PCV implementation over the long-term should be considered by decision makers.

PIN117

SCORING AND MEASUREMENT PROPERTIES OF A TOOL TO ASSESS PRIMARY CARE PHYSICIANS' ENGAGEMENT IN AND PERCEIVED BARRIERS TO VACCINATION: THE 'DETERMINANT OF INTENTIONS OF VACCINATION' (DIVA©) QUESTIONNAIRE

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OBJECTIVES: Primary care physicians (PCPs) play a key role in France in the prescription and administration of recommended vaccines. Uneven vaccination coverage in vulnerable populations appeals for specific interventions to be designed to address existing barriers faced by targeted groups of PCPs. The 'Determinant of Intentions of VAccination' (DIVA©) questionnaire was developed to assess PCPs' attitudes and beliefs toward vaccination. The objectives of the study were to define the scoring rules and to assess the measurement properties of the DIVA questionnaire. **METHODS:** A cross-sectional study was conducted in France with PCPs to define the scoring of DIVA and to assess its measurement properties. PCPs had to complete the DIVA questionnaire in to any of the six vaccine-preventable diseases (VPD) they were randomly assigned (measles, pertussis, pneumococcus infection, seasonal influenza, HVP infection and tetanus). Internal consistency reliability and known groups validity were assessed. **RESULTS:** DIVA was completed by 1,069 PCPs (mean age 48; 58% male), with very good quality of completion (90% of questionnaires with no missing item). One redundant item was removed from the questionnaire. The final DIVA was composed of 55 items, grouped into six thematic domains covering disease, vaccine, information, organisation, consultation, and PCP experience, and one domain assessing PCP's engagement. The Engagement score showed very good internal consistency reliability across the six VPD (0.80≤Cronbach's alpha<0.90). The Rasch model validated the number, content and modalities of items of the Engagement domain. The six thematic scores showed overall good known groups validity. **CONCLUSIONS:** DIVA is a valid and reliable measure to assess PCPs' engagement toward vaccination, as well as the specific barriers they face in various VPD. DIVA might help to define specific interventions aimed at improving PCPs vaccination activity, and can serve as an outcome measure to assess the impact of such interventions.

PIN118

MONITORING OF CRITICAL LABORATORY RESULTS TO IMPROVE QUALITY OF PATIENT CARE IN A LARGE URBAN CLINIC IN UGANDA

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OBJECTIVES: Follow-up of critical laboratory results can present a challenge in resource limited settings due to high patient volumes, overstretched human resources and no systematic communication from the laboratory. An audit conducted in 2013 in a large outpatient HIV-center revealed that <50% of critical results were acted upon within 24 hours. Our objective is to describe the impact of the new developed guidelines on reducing mortality of patients with critical results. **METHODS:** Results must be immediately communicated by the laboratory to a physician via an "on-call phone"; patients should be contacted and asked to return to the clinic. In addition all critical laboratory results were reviewed and tagged by Quality Management staff. Design: retrospective survey of all files of patients who had in 2014 at least one of the following: Hb <5.5g/dl, creatinine >3.4mg/dl, positive serum Cryptococcus-Antigen (Crag). Clinician's actions were categorized and described. Turnaround time was determined and incidence of mortality between 2013 and 2014 compared. **RESULTS:** During 2014, 5,907 patients had any laboratory test done. Hb <5.5g/dl: 36(0.6%) patients. Action taken: blood transfusion 17/36 (47%), heamatinics14/36(39%) and 2/36(6%) dewormed. Creatinine >3.4mg/dl: 64/3291(1.9%) patients. Action taken: antiretroviral treatment regimen switched 43/64(67%), 2/64(3%) stopped, 12/64(19%) referral to the renal unit. Positive serum-Crag 17/464(3.7%). Action taken: 12/17(71%) started on fluconazole, 5/17(29%) were already on treatment. Turnaround time for Hb and serum crag was <1 day, creatinine 13.3 days. From 2013 and 2014 the mortality decreased in patients with Hb<5.5g/dl from 27.9 to 2.8%, with creatinine>3.4mg/dl from 32.9 to 3.1% and with positive serum-Crag from 36.4 to 23.5%. **CONCLUSIONS:** Critical results monitoring system greatly improves patient turnaround time, and reduces mortality through timely communication and patients follow up. We believe our system could serve as a role model for similar programs in Sub-Saharan Africa to improve quality of care.

PIN119

COST ANALYSIS OF TWO METHODS FOR IMPROVING THE QUALITY OF CARE (QOC) SCORES IN PAEDIATRIC HOSPITAL WARDS DURING WINTER PERIODS

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